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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,246	10/31/2003	Nobuyuki Nonaka	SHO-0049	9027

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EXAMINER

KARKHANIS, AASHISH

ART UNIT	PAPER NUMBER
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3714

MAIL DATE	DELIVERY MODE
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06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/697,246

Applicant(s)

NONAKA, NOBUYUKI

Examiner

Aashish Karkhanis

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3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 –9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemoto et al. (U.S. Patent 6,655,965 A).

Regarding Claims 1 – 2 and 5 – 6, Takemoto discloses a display device provided in a gaming machine such as a slot machine or a pachinko machine, wherein a pitch P between pixel units each of which is formed by arranging each kind of a plurality of kinds of pixel electrodes which display predetermined colors respectively (col. 1, lins. 20 – 25; where color slot machine games with liquid crystal displays are notoriously well known in the art), but does not disclose specific relationships between pitch, and distance using correction values. However, it would have been obvious to one of ordinary skill in the art at the time of invention to have included a distance d from the display device to a player in a normal game posture, and a correction value α satisfy a relationship of:

$$P = \tan (\pi/180/35) (d/2) (1+\alpha)$$

where the correction value α is ± 0.2 .

Distance is specified as between 400 – 500 mm in applicant's specification as an optimal range for distance between a player and a liquid crystal display. This distance,

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which is 0.5 m, would have been obvious to one of ordinary skill in the art because it is an intuitive distance between a player and a screen for comfortable operation of a game system where a player can rest an arm while operating a gaming machine. This would mean that a comfortable distance is half the distance of an arm length, given that the majority of players' arms are greater than 0.8 m and less than 1.0 m.

A correction value of α is also given of 0.2 to provide a 20% tolerance on pitch value. Within digital display systems of all kinds, pitch is well known and established in the art as the distance between pixels in a display system. Modifying α within a 20% tolerance would allow a display to be optimized for a player at any distance within the 400 – 500 mm range for a slot machine. This would reduce problems such as a difficult to view large display if the average user were 300 mm away and the pitch equaled 0.30 without correction, or a difficult to view small screen if the average user were closer to 500 mm away and the pitch equaled 0.12 without correction.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the generic slot machine game with LCD of Takemoto to define an optimal distance between a user and a liquid crystal display as defined above in order to provide the most comfortable and enjoyable viewing and playing experience for a player.

Regarding Claims 3 and 7, Takemoto discloses a display device wherein the pixel electrodes are arranged in matrix on an x-y plane, and the pixel electrodes of the same color are arranged in a y direction and the same pattern is continuously arranged in an x direction to form a stripe (col. 8, lins. 30 – 34; where positions of screen

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elements are given using coordinates and the display region is defined in terms of the number of dot pixels in horizontal and vertical directions, forming both a matrix and vertical and horizontal stripes).

Regarding Claims 4 and 9, Takemoto discloses a display device, wherein one pixel is constituted by a pair of the pixel units that are adjacent, and information signals for one pixel are supplied in the same timing to pixel electrodes for the same color that are contained in the pair of pixel units respectively (col. 1, lins. 20 – 25; where the use of color pixels and pixel electrodes to power liquid crystal displays is notoriously well known and established in the art).

Regarding Claim 8, Takemoto discloses a gaming machine wherein the display unit is a highly transmissive liquid crystal display provided in a game board (fig. 2, elems. 101, 110).

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive.

Applicant maintains that the claimed invention distinguishes over the prior art because Takemoto does not disclose the specific pitch relationship disclosed by the claimed invention. The examiner respectfully disagrees. As disclosed above, Takemoto discloses an LCD display, where modifying the pitch between pixels is notoriously well known and established in the art of LCD display. Further, as discussed above, motivation does exist to modify the pitch to a specific value as given by the applicant in order to provide a screen which is easily viewable to a player sitting an estimated arms-length from a game screen.

Therefore, for the reasons given above, claims 1 – 9 stand rejected.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aashish Karkhanis whose telephone number is (571) 272-2774. The examiner can normally be reached on 0800-1630 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARK

/Corbett Coburn/
Primary Examiner
AU 3714